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PATENT

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Applicants	:	Filepp et al.	Group Art Unit:	2153
Serial No.	:	08/933,500	Examiner	: Dinh, Dung C.
Filed	:	September 18, 1997		
For	:	INTERACTIVE COMPUTER NETWORK AND METHOD OF OPERATION		

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RESPONSE TO NOVEMBER 7, 2002 OFFICE ACTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Reconsideration of the above-identified application and the rejections set forth in the Office Action dated November 7, 2002 in light of the following remarks is respectfully requested. The rejections and issues raised by the Office Action are addressed in the same order presented in the Office Action.

I. The 35 USC § 101 Rejection

Claim 33 has been rejected under 35 U.S.C. § 101 as claiming the same invention as that of Claim 1 of U.S. Patent No. 5,758,072. While the Office Action states that the "rejection is based, in part, on applicants' admissions and remarks contained in the 'Request For Interference Under 37 CFR § 1.607' filed on September 18, 1997," the only stated basis for this rejection is the alleged admissions in the September 18, 1997 paper.

Applicants respectfully submit that any reliance on their alleged admission is misplaced. In their response filed on March 1, 1999, Applicants withdrew their reliance on Claim 10 of application Serial No. 08/740,043 (which ultimately issued as Claim 1 of the '072 patent) as the basis for satisfying the requirements of 35 U.S.C. §135(b). As a result, whatever admission might exist with respect to that claim, it is irrelevant to the present proceedings because Claim 1 of the '072 patent no longer serves as the predicate for Applicants' interference request.

Instead, Applicants have, since March 1, 1999, relied on Claim 1 of application Serial No. 08/158,026 as the basis for satisfying section 135(b). This claim has not issued in a patent and thus cannot form the basis for a statutory double patenting rejection.

Accordingly, the statutory double patenting rejection of Applicant's Claim 33 under 35 U.S.C. § 101 should be withdrawn because the stated predicate for that rejection is not viable.

II. The Obviousness-Type Double Patenting Rejection Of Claims 34-72 Based On Claim 1 Of U.S. Patent No. 5,758,072

Claims 34-72 have been rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claim 1 of the '072 patent. This rejection is also based on Applicant's alleged admission, since withdrawn, with respect to Claim 10 of Application Serial No. 08/158,026, which issued as Claim 1 of the '072 patent. Therefore, for the reasons set forth herein, no basis exists for this rejection. However, if Applicants remarks herein are not deemed sufficiently persuasive to overcome the instant rejection, Applicants attorneys will file a terminal disclaimer to obviate the rejection.

**III. The Obviousness-Type Double Patenting Rejection of
Claims 33-34, 43-46, 47, 57-60, 62, 64-66, 67 and 70-72
Based on Claims 1-6 of U.S. Patent No. 6,182,123**

Claims 33-34, 43-47, 57-60, 62, 64-67 and 70-72 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-6 of U.S. Patent No. 6,182,123. Applicants' attorneys will file a terminal disclaimer to obviate this rejection.

IV. The 35 USC §112 Rejections

Claims 35-36, 48-49 and 62-72 have been rejected under 35 U.S.C. § 112, first paragraph, as lacking written description in the specification supporting (1) the steps of automatically connecting the remote computer to the main computer after the selecting step, and automatically disconnecting after the variable data is received (Claim 35-36, 48-49 and 68-69); and (2) the recitation of an electronic catalog system (Claims 62-72). Applicants respectfully request reconsideration of these rejections.

Contrary to the Office Action's contention, the recitation in claims 35-36, 48-49 and 68-69 of automatically connecting the remote computer to the main computer after the selecting step, and automatically disconnecting after the variable data is received, is supported by the specification of Applicants' priority application Serial No. 08/158,026. For example, the '026 specification contains the following explanation of those automatic operations:

The first program, shown in Display field 270, 271, is called an initializer and is invoked unconditionally by TBOL interpreter 438 concurrently with display of presentation data for the partition. In this application, the function of the initializer is represented by the following pseudo-code:

1. Move default values to input and display fields;

2. "SEND" a transaction to the apple application that is resident on interactive system 10;
3. "RECEIVE" the result from interactive system 10; i.e. the current price of an apple;
4. Move the price of an apple to PEV 271 so that it will be displayed;
5. Position the cursor on the input field; and
6. Terminate execution of this logic.

Specification, P. 149, line 28- P. 150, line 5 (emphasis added). Applicants' specification further discloses that data which is not available at the remote computer will be retrieved from the main computer (P. 150, lines 34-36). No action is required by the user once an application is selected which requires data not available at the remote computer. The request will be sent to the main computer automatically.

In any event, the steps of automatically connecting and disconnecting are inherent in a distributed computing environment of the type disclosed by Applicants wherein data for use in applications at the remote computer is retrieved from the network delivery system (i.e., main computer) when such data is not stored at the remote computer. After the remote computer software determines that needed data is not available at the remote computer, it has no choice but to retrieve the data from the main computer; no action is required on the part of the user once an application is selected which requires data not stored at the remote computer. This is a fundamental aspect of Applicants' invention.

Applicants' specification also supports the electronic catalog system of Claims 62-72. Applicants disclose a remote computer with memory for storing programs having revision indicia in the form of a network that features a plurality of remote computers for displaying information and providing transactional services to users. Specification p.7, lines 7-

14. A specific example of the accessing of product information and completing a transaction involving the product is provided by Applicants as the example of a user at the remote computer purchasing an apple through the network. At p. 137, lines 13-19, the price of an apple is described as data transmitted from the network (i.e., variable data) because it changes so frequently that the most current value always must be obtained from the network and there is thus no point in storing it locally. At p. 148, line 26- p. 153, line 10, the entire procedure by which the user interacts with the remote computer and the network to purchase apples is detailed. Again, at p. 149, line 36, the price of an apple is obtained from the network delivery system (or main computer) after being selected at the remote computer. The presentation data etc. related to the interactive apple purchase (i.e., constant data) is stored remotely because it does not change frequently. The constant presentation data etc. related to the purchase of apples is clearly shown in Applicants' Fig. 3b, with blank spaces for the variable price data which is ultimately transmitted from the network. Thus, Applicants disclose, inter alia, integrating constant data related to an apple purchase stored at a remote computer with variable data related to, e.g., the price of an apple obtained from the network delivery system.

V. The Purported Claim Rejections Under 35 USC §102/103

At pages 12-13, the Office Action has raised an earlier rejection based on Johnson et al. that was made in Applicants' priority application Serial No. 08/158,026. However, the Office Action explicitly states that "no art rejection of claim 33 based upon Johnson et al. is presented."

While no response appears to be required, Applicants respectfully reiterate, as a precaution, their traversal of the earlier rejection based on Johnson et al. Thus, as previously mentioned, Johnson et al. do not teach or suggest classification of data into types depending on

the frequency of change of the data, i.e., constant and variable data, ascribing storage control attributes to the data depending on its frequency of change and updating constant data at the remote computer if it is determined to be stale after comparing the revision status of analogous data stored on the main computer. Johnson et al. merely describe file sharing between nodes in a distributed computing environment and say nothing about the constant/variable dichotomy with respect to product information displayed on a remote computer in a network as appreciated, disclosed and claimed by Applicants.

VI. The Inquiry Under 35 USC §102

The Office Action asserts that “an issue as to patentability of the claimed subject matter because of public use or on sale activity has been raised by the applicant in this application.” According to the Office Action, Applicants stated in introductory remarks to a paper filed on September 18, 1997 herein (page 2) that Applicants were entitled to an effective filing date of July 28, 1989 and the Office Action drew the inference that by these introductory remarks Applicants had conceded the priority of two earlier applications.

To be clear, Applicants did not concede anything with respect to the priority of their applications filed on July 15, 1988 and March 23, 1989, as inferred incorrectly by the Office Action. Applicants have steadfastly maintained their claim to a priority date for the subject matter of claims 33-72 of at least as early as July 28, 1989. Indeed, in the same September 18, 1997 paper cited by the Examiner, under the heading “Effective Filing Date”, Applicants specifically stated that “Applicants are entitled to a priority date of at least July 28, 1989...” (page 16). The Office Action’s characterization of Applicants’ attorney’s statement (at page 2 of the paper) as a concession was erroneous. Applicant’s attorney’s statement was made in the context of merely predating the filing date of Hill’s U.S. Patent No. 5,528,490; it had

nothing to do with the public use or on-sale inquiry raised for the first time by the present Office Action. Although it is believed unnecessary to address or overcome the points made in the Office Action as to Applicants' priority dates, the disclosure of Applicants' March 23, 1989 application clearly supports copied Claims 33-72.

In order to eliminate any possible confusion, and for purposes of the instantly-claimed subject matter, Applicants now claim priority to at least as early as March 23, 1989 but Applicants do not concede priority to the July 15, 1988 filing date. For purposes of this Response, the issues of public use and on-sale need to be addressed only with regard to the March 23, 1989 and July 28, 1989 filing dates, without conceding priority of the original July 15, 1988 filing date. As demonstrated below, the subject matter claimed in Claims 33-72 was not in public use or on sale prior to March 23, 1988 or July 28, 1988, the critical dates corresponding to the March 23, 1989 and July 28, 1989 filing dates, respectively.

A prior art disclosure statement under 37 C.F.R. §1.197 was filed on March 4, 1991 in Applicants' great-great-grandparent application Serial No. 07/388,156 which included a disclosure of use information and an explanation as to why that use information is not anticipatory under 35 U.S.C. §102(b). The November 7, 2002 Office Action has required Applicants to provide additional information regarding the subject matter of the disclosure statement. An investigation has been undertaken to address this requirement for additional information, the results of which are summarized below. The undersigned attorney for Applicants makes the following statement on behalf of Applicants in response to subparagraphs (a) – (k) of paragraph 17 of the November 7, 2002 Office Action.

a. Basis of Statement

The statement herein is based on contemporaneous documentary evidence which is identified hereafter, the Declarations of Theodore Papes and Frederick S. Larson, submitted herewith, and the related investigation performed by or on behalf of the undersigned attorney for Applicants and information provided to the undersigned attorney for Applicants from the related investigation.

**b. Relationship Between Claims
And Implementation**

As originally conceived, the Prodigy[®] Service, to which this invention relates, called for a revolutionary new approach in distributed data processing. Indeed, it led to the first practical implementation of the Internet as we know it today. Thus the evidence submitted herein must be assessed relative to what was known prior to development of the modern Internet, during which time Prodigy was being developed. Because of its pioneering nature, almost two years was required to test and implement the Prodigy Service.

In formulating the framework for the Prodigy Service, Applicants¹ believed that to be commercially viable, the service would have to handle user populations in the millions dispersed over the entire country and to achieve quick response to requests for information and execution of transactions and do so at low cost. To achieve quick response times while maintaining viable pricing, Applicants believed it necessary to design the service architecture to speed system operation and hold equipment capital and operating cost low. Accordingly, Applicants believed the "dumb" terminal approach commonly used in conventional

¹ Reference to Applicants, Prodigy or Trintex should be understood to refer to Applicants and/or their assignees.

distributed computing systems at the time, with its reliance on host computer size and complexity, would not be suitable.

Instead, Applicants proposed to structure the Prodigy Service so that a user could employ a personal computer (PC) to access the system. This would permit use of the computing power of the user's own PC, thereby reducing demand on network resources. Further, to configure the service so that it could be handled by a user's PC, it was proposed that applications offered on the service be partitioned; i.e., structured as separable units of data and program code capable of being processed by the PC. Also, Applicants recognized that if the partitioned application units were made up of program code and data; i.e., "objects," the objects could be distributed throughout the system so that application display time could be minimized as a function of the storage capacity of the PC. Applicants believed that by composing the application to be executed at the PC from objects stored at the PC, the applications could be presented quickly and with minimal reliance on service resources.

However, to accommodate this intended role for the PC ("reception system"), the service software, i.e., software for the host, cache/concentrator system (collectively the "network delivery system") and reception system, together with the other support facilities - and the software for the various applications to be run on the service, had to be originally designed and created. Since these software designs would be new, Applicants naturally anticipated a substantial test and development period for the service software.

The inventors were not sure prior to no earlier than August of 1988, when the reception system software was released for reproduction in anticipation of retail launch, that their complex invention would work as intended in a large network with many thousands of disparate users. In accordance with established principles of law regarding experimental use, where an

invention is complex and the inventor is not sure that it will work for its intended purpose, the experimental use exception applies and a period of experimentation is reasonable to prove that the invention will work for its intended purpose. During that interval, the one year period of the statute will not begin to run. Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 64 (1998).

Applying this principle to Claims 33-72 of the present application, the invention is an integral part of a very large, complex, interrelated network delivery system and PC workstations. There was no certainty by the inventors that the invention would work in its intended setting where many thousands of users across the country would be simultaneously using the system -- and ultimately millions of users. The invention needed a long and graduated period of testing by a large number of users across a large geographic area to confirm that it would work for its intended purpose. Importantly, the present invention is quite different and significantly more complex than the invention in Pfaff v Wells.

Whether the public has access to the invention during the experimental test period is not dispositive with regard to the issue of public use. The rationale of the seminal Supreme Court road pavement case is illustrative:

Nicholson wished to experiment on his pavement. He believed it to be a good thing, but he was not sure; and the only mode in which he could test it was to place a specimen of it in a public roadway.... The public had the incidental use of the pavement, it is true; but was the invention in public use, within the meaning of the statute? We think not.

City of Elizabeth v. American Nicholson Pavement Co., 97 U.S. 126, 136 (1877); see also EZ Dock, Inc. v. Schafer Systems, Inc., 276 F.3d 1347, 1352 (Fed. Cir. 2002) (“[A]n inventor who seeks to perfect his discovery may conduct extensive testing without losing his right to obtain a patent for his invention -- even if such testing occurs in the public eye.”) Moreover,

“[c]ommercial purpose underlies virtually every contact between inventor and potential customer. When testing an invention entails customer contact, that does not convert an otherwise experimental purpose into a public use.” Allied Colloids, Inc. v. American Cyanamid Co., 64 F.3d 1570, 1575 (Fed. Cir. 1995).

The circumstances of the instant case are particularly analogous to those of City of Elizabeth, i.e., the only way to test the Prodigy System was to expand it to enough users to determine whether the system would work as intended under high-demand conditions.

The test and development period for Applicants' invention extended over almost two years and progressed through three phases. Throughout the three phases, efforts were undertaken to develop and test all components of the service hardware and software i.e., network delivery system, reception system, etc.

**c. All Of The Material Limitations Of Claim 33
Were Described In Priority Applications
Filed March 23, 1989 And July 28, 1989**

Claims 33-72 are entitled to priority to applications filed July 28, 1989 and March 23, 1989 and the claimed subject matter was not in public use prior to one year before either date.

The second continuation-in-part application (“CIP”) was filed July 28, 1989, more than one year after a demonstration of a Prodigy prototype was conducted at the West Coast Computer Faire (hereafter “Computer Faire”) in San Francisco, California during the week of April 7, 1988. As discussed below, the members of the public attending the Faire were told that the Prodigy service was not available then and was not being offered for sale. The purpose of the demonstration at the Faire was experimental in nature -- i.e., to gather information as to the

desirability and suitability of such a service. A further purpose for the demonstration was to expand the test user base so that more realistic testing of the system under actual anticipated conditions could be performed.

Moreover, the difference between the second CIP's disclosure and that of the first CIP (filed March 23, 1989) is not needed to support Claim 33 of the instant application. Claim 33 is directed to a method for distributing data in a network by including storage control parameters that establish the retention policy for that data at a local computer. The second CIP, filed July 28, 1989, added details of storage candidacy features, including fields in the message header for version ID, storage candidacy, classes of instability, and least recently used ("LRU") status. These attributes were broadly described in the first CIP and thus no features of Claim 33 lack support in the first CIP application filed March 23, 1989.

Further, the Prodigy Service demonstrated at the Computer Faire did not reveal the limitations of claims 33-72. At least the two claim limitations of (1) associating storage control parameters with the data to be stored, the control parameters dictating predetermined eligibility of the data for storage at the data stores, and (2) retaining data at the stores based on at least the eligibility for storage dictated by the respective storage control parameters could not have been revealed. Thus, there could have been no public disclosure of the claimed invention.

Accordingly, the demonstration of the Prodigy Service at the Computer Faire more than one year before the filing date of the second CIP does not affect the patentability of the claims of the instant application. Also, the demonstration at the Computer Faire was less than one year prior to the first CIP filed March 23, 1989. Following is a detailed discussion of the testing of Applicants' invention from late 1987 through late 1988 to determine whether the invention would work for its intended purpose.

d. Stages of Experimental Testing

A chronology of events pertinent to the disclosed use information and in response to the November 7, 2002 Office Action is summarized as follows:

1. a first phase of Prodigy development and testing started in January 1987 and ended in September 1987,
2. a second phase of Prodigy development and testing started October 1987 and ended March 1988,
3. a demonstration of a Prodigy experimental prototype was conducted at the West Coast Computer Faire in San Francisco, California during April 7-10, 1988,
4. a demonstration of a Prodigy experimental prototype was conducted at a Comdex convention in Atlanta, Georgia during early May 1988,
5. the original parent application Serial No. 219,931 was filed on July 15, 1988,
6. a third phase of Prodigy development and testing continued from March 1988 and ended on August 5, 1988 with the formal release of the reception system software from development to diskette reproduction so that public retail sale could commence in September 1988,
7. a first continuation-in-part application Serial No. 07/328,790 was filed March 23, 1989, less than one year after the reception system software was released for reproduction for retail sale to the public,
8. a second continuation-in-part application Serial No. 07/388,156 was filed July 28, 1989, also less than one year after the reception system software was released for reproduction for retail sale to the public.

Throughout the three phases of the test and development period, Prodigy sought to determine whether the reception system was suitable for its intended purpose. Since the primary requirement for the reception system was to enable very large user populations to manipulate the partitioned applications available on the service, the objective from the first

through the third phase of testing was two-fold: (1) to determine whether the reception system would be capable of automatically staging, i.e., storing constant data on a user's PC between sessions, and processing partitioned applications at all, including updating constant data, retrieving variable data from the network and integrating the two types of data together to create a display²; and (2) whether the capability to maintain current constant data on the user's PC, retrieve variable data on an as-needed basis and integrate constant and variable data to create a display would be sustained as user levels were progressively increased toward the levels anticipated for the intended environment and the distributed network became more and more geographically dispersed, i.e., as the network system became more and more taxed.

Once Applicants recognized it was essential to expand the user population to assess whether the reception system would perform in its intended environment, Applicants also recognized that at least a portion of the experimental testing would have to involve users who were members of the general public. Also, it was necessary to establish that reliable communication could be maintained for the required session lengths, which meant expanding to large numbers of users.

The design of the reception system and other elements of the Prodigy Service network required development of new and original software. The Service also required the multiple software elements to be coordinated and harmonized for cooperative operation within the Service network. New software and software combinations are inherently unpredictable in their initial stages of development. It is difficult, if not impossible, to know for sure how such

² The response herein is directed to the issue of public use and/or on sale as raised by the November 7, 2002 Office Action, i.e., with respect to the currently claimed invention (copied claims 33-72), and is not intended to address any other related applications or claims.

combinations will operate and interact. It was thus deemed essential that some testing be undertaken in an environment simulating the environment in which the reception system was intended to operate.

However, a meaningful simulation of the intended use environment for the Prodigy Service could not be achieved in a conventional laboratory or test facility. User populations in the millions spread over a wide geographic area were considered necessary for a commercially viable service. Laboratory testing of even a very small fraction of such a population would have been physically and economically impossible to achieve at Prodigy's facilities, and of no use in determining the feasibility of the invention.

To minimize the amount and duration of testing using members of the general public, Prodigy sought to advance the basic viability study of the reception system as far as possible in the first and second phases of testing, and leave expanded population; i.e., stress testing, to the end. The duration of the third phase of testing was the shortest of the test and development periods, lasting barely four months.

The first phase of the test and development period extended from approximately January 1987 through September 1987. During that period, efforts were directed to establishing the viability of the general concepts underlying the proposed Prodigy Service. In this phase, testing was conducted confidentially by Prodigy employees and outside consultants either at the Prodigy facilities or from the homes of the Prodigy employees, the employees acting as pseudo-subscribers. (Minutes of Trintex Partners' Committee Meeting 11/18/87, p. 2 (Exhibit 1); Minutes of Trintex Partners' Committee Meeting 2/3/88, pp. 2-3 (Exhibit 2)).

Once Prodigy determined that the basic approach to the Prodigy Service was feasible, testing entered a second phase. In the second phase, Prodigy sought to determine if the

Service would continue to operate in the hands of users who, while experienced with computer technology, had not contributed to, nor participated in, the design of the Service. (Minutes of Trintex Executive Committee Meeting 4/6/88, pp. 2-3 (Exhibit 3)). Additionally, Prodigy sought to determine if the reception system would continue to operate as changes were made in it to fix problems encountered and to encompass the broader range of subscriber hardware and operating system configurations that existed in the subscriber population Prodigy intended to serve. Prodigy further sought to test whether the reception system would continue to operate with the growing number of applications of increased complexity being added to the Service. Id.

From its inception Applicants believed the Service would have to provide a broad range of transactional and informational applications to be accepted by the public. This was the genesis of Applicants' concept that storing less frequently changing data, i.e., constant data, on the user's PC and retrieving only frequently changing data, i.e., variable data, from the network would significantly enhance the speed of the Service. To be viable, it was also believed that the Prodigy Service would have to include transactional applications such as electronic banking, financial management, home grocery shopping, travel reservations and department store shopping, among others. Similarly, it would be essential to provide informational and entertainment applications such as current events, sports and business news. This range of applications required a broad scope of objects that varied in number and complexity. Accordingly, the objects for these applications presented a significantly varying level of load on the reception system and Service, which had to be tested before the Service could be commercially offered to the public. Well into the Fall of 1988, Prodigy was experimenting with ways to better facilitate transactional and informational applications by, e.g., reducing the amount of data that needed to be transmitted. (Memorandum from Robert Filepp, September 13,

1988 (Exhibit 4). Further, since the range of applications called for a diversity of sponsorship and required a significant amount of software development, not all applications were initially immediately available for testing. Accordingly, reception system testing had to be coordinated in time with the expanding complexity of the Service, a coordination that extended through both the second and third phases of test and development.

The second phase of testing and development extended from approximately the beginning of October 1987 through the end of March 1988. (Minutes of Trintex Partners' Committee Meeting 5/25/88, p. 2 (Exhibit 5)). During this phase, Prodigy organized three small groups of approximately 100 individuals each, the groups being located at select points across the United States corresponding in a small way to the extent of the communication links setup anticipated for the service (Hartford, CT; San Francisco, CA and Atlanta, GA). To foster interest and maintain confidentiality, individuals selected for each of the groups either had some relation to Prodigy or were likely to have technical interest and familiarity with computer technology that would enable them to test the reception system and Service.

All testing in the second phase was conducted on a confidential basis and the reception system software and use of the service were provided to the users free of charge. Tight control was maintained over usage of the reception system and service by issuing identification numbers that the users had to present, and that had to be accepted, each time the user sought access to the service. Prodigy retained ownership of the reception system software, providing only a license for its use. In accordance with the terms of the license, the user was obliged not to attempt to reverse compile or otherwise reverse engineer the source code. Prodigy also monitored activity of these individuals by tracking identification numbers and noting frequency of use, type of applications viewed and duration of use sessions. Prodigy also maintained

technical support telephone lines so users could report all problems encountered. In addition, Prodigy monitored the effect of usage on network performance. Prodigy also met periodically with representatives of the various groups to discuss the users' experiences and problems. And, as the reception system software was revised, the later versions were provided to the users for further testing. (Minutes of Trintex Partners' Committee Meeting 2/3/88, p. 3 (Exhibit 2)).

The first group in phase two that participated in the testing included approximately 100 IBM employees located in the Hartford, Connecticut area, since IBM was one of the founders of Prodigy. This group first became involved in October of 1987 when the Prodigy host and service were established for external access. In the course of the testing, the IBM-Hartford group remained substantially stable in size, the group growing only slightly from 100 to 109 individuals over the 6 month period from October 1987 through the end of the second phase of testing in March 1988. (Minutes of Prodigy Executive Committee Meeting, 6/29/88, attached Exhibit A (Exhibit 6)).

The second group established in phase two of the test period included a panel of individuals from the Atlanta, Georgia and San Francisco, California areas. These individuals were typically employees of companies who were sponsoring or planning to sponsor applications on the Prodigy service, or who maintained some direct relationship with Prodigy, e.g., employees of the company that provided modems that were to be offered by Prodigy to future subscribers. This group began in approximately November of 1987 with some 30 individuals and grew to 163 individuals by the end of the second phase of testing in March 1988. Id.

Finally, the third group included members of the Connecticut Computer Society located in West Hartford, Connecticut, and comprised approximately 80 individuals in January

1988 when it first became active. Subsequently, the group expanded to 95 individuals by the end of the second phase of testing in March 1988. Id.

Hartford, Atlanta and San Francisco were always considered test cities during the testing and development of the Prodigy Service in 1987 and 1988. (Papes Declaration, ¶ 5 (Exhibit 7)).

Prodigy issued "Rules for the Hartford Pilot," for the experimental run which took place between September 1987 and March 1988. The "Rules" detailed the confidentiality obligations imposed on the users and the experimental nature of the testing as follows:

During the Hartford Pilot of the PRODIGY service in which you are participating, each Member will play an important role in helping determine the future scope of the PRODIGY service. During the Pilot, TRINTEX will request your comments (to help refine the content) and your active on-line participation (to help test the system). It is important that each Member maintain the integrity and confidentiality of this important proprietary Pilot by not showing, discussing with or disclosing to any non-Member the PRODIGY service, the PRODIGY software, the Service Guide, or other materials provided by TRINTEX as part of the Pilot, or their contents, and each Member agrees to abide by these requirements during and after termination of their Membership, and to return all materials to TRINTEX upon request.

(Pp. 1-2 (Exhibit 8). The Rules also indicate that "[d]uring the Hartford Pilot, there will be no charge for use of the PRODIGY Service". (P. 2, Exhibit 8).

At all times during the testing and development of the Prodigy Service, including during phase two of the testing, membership obligations and conditions were applied to all members on an equal basis. (Larson Declaration, ¶ 7 (Exhibit 9)). The "Rules for the Hartford Pilot" were indicative of the conditions under which users participated in the testing and development of the Prodigy Service during phases one and two, i.e., from September 1987 through March 1988. Id., ¶ 8. Users in the San Francisco, Atlanta and Connecticut Computer

Society panels would have been treated identically to the Hartford Pilot testers with regard to membership obligations and conditions. Id., ¶¶ 9-10.

Following the second phase of test and development, these groups continued to operate into and through the third phase of test, growing only slightly in size. Ultimately, when Prodigy began to close out the third phase of testing in July 1988, the three groups comprised 109 Hartford IBM employees, 166 Atlanta and San Francisco panel members and 96 Connecticut Computer Society members. (Minutes of Prodigy Executive Committee Meeting, 7/20/88, attached Exhibit A (~~Exhibit 10~~)).

As a result of technical problems encountered in the second phase of testing, the broadening range of PC hardware and operating system combinations required to be supported in the anticipated subscriber population, and the continuing increase in the number and complexity of Service applications, a new version of the reception system software was created during the second phase of testing. The new version was directed to improving, inter alia, response time and order processing, both of which were inextricably related to the claimed invention. Moreover, the system still had not been tested in an environment having a sufficiently large number of users with minimal technical understanding as would show whether the Service could be offered generally to the public, or whether further changes would have to be made before the reception system and Service would perform as intended. (Minutes of Trintex Executive Committee Meeting 4/27/88, p. 3 (Exhibit 11)).

The Prodigy reception system was an integral part of a sophisticated computer network that was required to perform in harmony with the network system, application objects (e.g., data) and the user's PC to compose and display applications from objects stored locally on the user's PC or retrieved from the network if not stored locally. Because the demands of the

many reception systems were focused at the host computer, and because the Prodigy Service as structured was a pioneer system, it was by no means certain what the effect on performance would be if the subscriber population was dramatically increased. (Papes Declaration, ¶15 (Exhibit 7)).

It was therefore decided to test the reception system and Service over a broader user base, i.e., stress testing. It was proposed to gradually increase load levels by progressively adding groups of individuals secured from the public sector. This testing constituted the third phase of the test and development period which started on or about the beginning of April 1988 and extended at least through the beginning of August 1988. (J.H. Beall, Monthly Activity Report August 1988, dated September 14, 1988, p.3 (Exhibit 12)). For the third phase, Prodigy added more users to the approximately 300 users of phase two; i.e., the users in the test groups in Hartford, Connecticut, Atlanta, Georgia and San Francisco, California. Distribution of the reception system software in the new version that emerged from the second phase of the test period began on or about March 29, 1988. Use by the "Founding Members" thereafter grew from approximately 50 members at the beginning of April 1988, to 3,165 by the end of May 1988. (Member Acquisition Thru July 25, 1988 (Exhibit 13); see also Minutes of Trintex Partners' Committee Meeting 5/25/88, p. 4 (Exhibit 5)).

As before, in the phase three testing, the reception system software and Prodigy Service were provided free of charge. The "Founding Members" were a select group of individuals and groups representative of those who ultimately were likely to be interested in the Service. These test candidates were approached by mail and telephone and offered the reception system and Service on this limited test basis. As part of the program, the new users would receive revisions of the reception system software produced during phase two testing, along with

six months use of the Service for free. Additionally, if the participants wished to continue the service at the end of the six-month free period, they could do so at a reduced rate that would extend for up to a year thereafter. Further, if the prospective new users did not have a modem to access the Service, Prodigy offered one at a reduced price. (Minutes of Trintex Partners' Committee Meeting 2/3/88, pp. 3-4 (Exhibit 2)).

Prodigy retained ownership of the reception system software during the phase three testing, providing only a license to the prospective users. Under the terms of the license, the users were precluded from any attempt to reverse compile or otherwise reverse engineer the source code. Prodigy again controlled use of the reception system software and access to the Service by issuing identification numbers that were required to be presented by the individual users at log on. Also as before, Prodigy compiled and maintained extensive records concerning the frequency, duration and character of use. A user telephone support line also was maintained for the reporting of problems. The consequence of the increased usage on all levels of the Service network was closely monitored. While the internal operation of the reception system software was not disclosed to the new users, strict confidentiality was not imposed, since it was not practical in such a broad based test that was essential to determine whether the system would work for its intended purpose. (Papes Declaration, ¶16 (Exhibit 7)). In any event, the architecture with respect to the implementation of storage control was maintained as confidential information.

At the beginning of June 1988, in accordance with the plan of gradual increase in system loading, Prodigy sought to broaden the user population to assure that when ultimately offered to the public, Service would operate as intended. Accordingly, at the beginning of June, Prodigy offered prospective users a further revision of the reception system and a free three

month period of use of the Service as so called "Charter Members." However, Prodigy did not offer continuation of the Service at a reduced rate following the free period. Additionally, while Prodigy later offered a modem at a reduced price, the price reduction was not as large as offered to the Founding Members. (Minutes of Trintex Partners' Committee Meeting 2/3/88, p. 3 (Exhibit 2)).

The Founding and Charter Member programs involved the acquisition of additional test users in the previously established test cities, i.e., Hartford, San Francisco and Atlanta, for the purpose of testing the Service over a larger user base. (Papes Declaration, ¶ 6 (Exhibit 7); Larson Declaration, ¶ 11 (Exhibit 9)). At the time of the Founding and Charter Member programs, the Prodigy Service was still in system test and it was felt that a significant expansion of the user base was needed to fully test the system functionality with a focus on identifying potential points of failures in the system. (Papes Declaration, ¶ 7 (Exhibit 7); Larson Declaration, ¶ 12 (Exhibit ¶ 9)). The Founding and Charter programs were primarily directed to testing and development of the Prodigy Service and not to commercial marketing (Papes Declaration, ¶ 10 (Exhibit 7); Larson Declaration, ¶ 15 (Exhibit 9)). Mr. Theodore Papes, President and Chief Executive Officer of Trintex, later renamed Prodigy Services Company, made a videotape for Prodigy Employees in early 1989. (Papes Declaration, ¶¶ 3, 12 (Exhibit 7)). A copy of the videotape is attached as an exhibit to Mr. Papes' Declaration. The videotape was an effort to communicate the progress that had been made toward establishing the viability of the Prodigy Service. In the videotape, Mr. Papes referred to the Founding Member Program as "fine tuning" of the Service before it was made widely available. To the extent the meaning of the term "fine tuning" may be unclear, Mr. Papes has confirmed that during the Spring and Summer of 1988, many technical issues remained to be resolved before the Prodigy Service

would be ready for marketing as a commercial service. Id., ¶¶ 13-14. Indeed, the first effort to commercially market the Prodigy Service did not occur until the expansion of the Service to several California Cities in the Fall of 1988. Id., ¶ 11; Larson Declaration, ¶ 16 (Exhibit 9).

In the phase three testing with Charter Members, like the other phases, Prodigy retained ownership of the reception system software, the new members receiving only a license to use it. And as before, in accordance with the terms of the license, the new users were obliged not to attempt to reverse compile or otherwise reverse engineer the source code. Prodigy again controlled use of the reception system software and access to the Service by issuing identification numbers that were required to be presented by the users at log on to the service. Extensive records concerning frequency, duration and character of use together with any problems were compiled. Prodigy also maintained a user support telephone line to enable the new users to report any problems. As before, Prodigy did not disclose the operation and structure of the reception system to the second group of users in the third phase of testing. These users were only given the reception system diskette and instructions on how to run the Service. Maintaining confidentiality was not practical in connection with use of the reception system or the Service during this phase. (Papes Declaration, ¶ 16 (Exhibit 7)). In the third phase of test, from approximately June 1988, the number of users grew from approximately 3,165 Founding Members to a total of approximately 8,330 Founding and Charter Members at the beginning of August 1988. (Member Acquisition Thru July 25, 1988 (Exhibit 13)). The following table shows the maximum number of users in each of the test groups during the different phases of testing.

	Phase I Jan. – Sept., 1987	Phase II Oct. 1987-March 1988	Phase III April – August 1988
Hartford Group	0	109	110
San Francisco and Atlanta Groups	0	160	165
Connecticut Computer Society	0	90	100
Founding Members	0	0	3165
Charter Member	0	0	5165
Total External Testers	0	359	8705

Under the circumstances, a total of 8700 testers was not a large group considering the objective of testing whether the Prodigy Service would work as intended on a large scale, i.e., with users numbering in the millions. Even after distribution to the Founding and Charter Members, the Prodigy Service had been distributed to a very small group of test users but had not yet been demonstrated to be capable of servicing a large number of users. (Papes Declaration, ¶ 15 (Exhibit 7)).

Following distribution of a revised version of the reception system software to the Charter Members in June of 1988, Prodigy recognized that another revision of the reception system would be required. However, Prodigy believed that if this further revision performed as intended, it could support release of the Service to the general public. Accordingly, following continued internal development of the further revision of the reception system, on or about August 5, 1988, Prodigy approved release of the further revised version of the software to support the public offering of the Service. Even then, testing of the system continued to focus on the shopping aspect of the Service as well as storage of data at the user's computer, both of which are aspects of claims 33-72:

In order to test throughout the entire service all jump words were accessed. Items were ordered from a variety of vendors, and mail was sent and allowed to accumulate. The size of STAGE.DAT was checked periodically throughout, and it did not change.

(Testing of Prodigy Service, August 10, 1988 (Exhibit 14)). The stage.dat file contained data that was not subject to frequent change or update and thus was retained on the user's computer between user sessions, i.e., constant data. A new version of the reception system software was released in August 1988 which was primarily directed to correcting a problem with remote updating of the stage file:

Version 2.0 (Release 6.02.04D) was shipped to all enrolled members in August. In addition to many small features and usability enhancements, this release was intended to address the OMS 14 problem associated with the remote stage update. Since the distribution of Version 2.0 the OMS 14 problem has essentially disappeared.

J.H. Beall, Monthly Activity Report August, 1988, dated September 14, 1988, P.3 (Exhibit 12). Further testing focused on the stage.dat file because there was a problem with that functionality, as evidenced by a "Problem Management Scoreboard" dated September 27, 1988:

Stage and Cache.dat are corrupting the FAT tables and subsequently c: drives of members' pc's. This problem seems to have been interwoven with the stage.dat situation and may have become much less of a problem with V.6.2.4d. We're following primarily for tracking, at this point.

(Membership Services – Problem Management Scoreboard, September 27, 1988, p.2 (Exhibit 15)). The cache file contained data that was retained on a user's computer during a user session but was not retained between sessions, i.e., variable data. Problems with the stage.dat file were still being reported and monitored in October 1988:

The problem is seen in the stage.dat file.... [I]t would appear that the stage files are not being updated, for whatever reason.

Membership Services- Problem Management Scorecard, October 12, 1988, p.2 (Exhibit 16); See also Michael L. Gordon, Reception System Large Stage Support, October 20, 1988 (Exhibit 17).

Thus, even in late 1988, Prodigy could still not be certain that the system was functioning properly with respect to the claimed aspects of storing constant data at the user's computer and retrieving variable data from the network delivery system when needed.

The concern over the speed of data delivery was still very much apparent in November 1988, as evidenced by the results of a "Satisfaction Survey" reported in Minutes of the Prodigy Executive Committee Meeting:

[S]peed and lack of depth were the two most important negative things about the service, with speed being far ahead of any other item and having the largest difference between the mean importance and mean satisfaction scores.

(Minutes of Prodigy Executive Committee Meeting, 11/22/88, p.2 (Exhibit 18)). Also in November 1988, it was very apparent that the software was still being modified to improve performance with respect to the storing of constant data on the user's computer. In a document titled "MS/DOS RELEASE 7.1 HIGHLIGHTS" dated November 9, 1988 (Exhibit 19), a "VARIABLE SIZE STAGE" is listed as a performance enhancement. This enhancement immediately follows the problem reported with the stage.dat file noted above. Still further, changes were being made with respect to the staging of data at the user's computer even as late as 1989. (Memorandum from C. Scrivanich et al. to J. Sacolick et al., January 23, 1989 (Exhibit 20)) ("no STAGE.DAT file will exist on the Prodigy Installation Disks of release 8.N. A file called PAC_OBJ.DAT will take its' place. Install will create a STAGE.DAT customized to the user's configuration and based on parameters contained in PAC_OBJ.DAT.")). This work on the staging of data was a direct result of feedback from user/testers of the system which indicated

that the staging of data at a user's computer could beneficially take advantage of the storage space available to optimize the delivery of data:

Large stages may be beneficial in environments that can support the disk and memory resources necessary for their existence. Potentially, more objects can be locally available for use. There is concern that if the universe of stage candidate objects is increased to exploit the increased storage capacity of the large stages, there may be negative consequences to performance of the regular sized stage, such as thrashing.

When a stage is created, it will be assigned the classification of either a regular or large sized stage.

Two storage candidacy values will be created for objects which are candidates for a large stage, large stage candidate with and without version checking. An object with either candidacy will be a stage candidate for a large stage and will be treated as a cacheable object if a regular sized stage is present.

Michael L. Gordon, Self Configuring Stage Description, Revised March 1989, pp. iii, 2-3

(Exhibit 21) (indicating above-quoted text was added in the March 1989 revision).

Following approval in early August 1988, efforts went forward to distribute the final version of the reception system software to existing users, thus marking the end of the third phase of testing. Marketing of the Prodigy Service did not begin until late 1988. (Speech by Theodore C. Papes, Jr., November 1, 1989 (Exhibit 22) ("Late last year, we began marketing PRODIGY in a handful of markets."); Papes Declaration, ¶11 (Exhibit 7); Larson Declaration, ¶16 (Exhibit 9)).

Well into the Fall of 1988, users were being surveyed with regard to their views of the service to determine whether the service was performing its intended function as then configured. E.g., Minutes of Prodigy Executive Committee Meeting, November 22, 1988 p.2 (Exhibit 18) ("Mr. Polentz then reported on the results of a "Satisfaction Survey" conducted in

September among certain Founding and Charter members... speed and lack of depth were the two most important negative things about the service, with speed being far ahead of any other item").

During April 7-10, 1988, Prodigy representatives attended the West Coast Computer Faire in San Francisco, California at which they demonstrated the Prodigy service as it existed at the time. (Minutes of Trintex Executive Committee Meeting 4/27/88, p. 2 (Exhibit 11)). The demonstration lacked a number of the transactional applications which were added later, such as at home banking, grocery shopping and travel reservations. For the demonstration, Prodigy used the version of the reception system software that was then in field test and that version was subsequently revised twice more during the third phase of the test and development period. The observers were told that while the Service was not yet generally available, it was expected to be provided in the San Francisco area by the Fall of 1988. Some of the transactional applications that were envisioned for the Service were described and a demonstration diskette distributed that displayed "screen shots" of certain segments of the Service without support of the network. This demonstration was similar to a slide presentation and was not a demonstration of the actual Prodigy Service. The observers were invited to fill out a follow-up card if they felt they wanted to be contacted when the service became publicly available in the San Francisco area in the fall. Approximately 4,000 cards were filled out and submitted. Id., attached Exhibit A.

However, there was no attempt to sell the service or the reception system-software to any of the Computer Faire attendees. The purpose of the presentation at the faire was to assess the public reaction to the service as it then existed and the plans for its future development. For the Service to be successful it was thought necessary to include transactional

applications such as at home banking, stock brokerage, travel reservations and grocery shopping. However, those applications were as yet not available on the Service due to production complexity and associated difficulties. Accordingly, it was felt necessary to assess what the public reaction to the service would be with such applications missing, and whether the plan to provide such applications when the service was released would meet with public approval.

Accordingly, the demonstration was not an attempt to commercially exploit the reception system. A limited number of terminals were used for the demonstration, each requiring only a prototype form of the reception system software. Because no major transactional applications were available at the time, the reception system was not called upon to exhibit certain features that were fundamental to its intended commercial form. Specifically, the reception system was not used to demonstrate its ability to operate with large user populations, or to show the full range of applications intended for the form of the Service envisioned for public release, or the range of PC hardware and operating system combinations it would be required to support when released. As noted, these were the features for which the reception system was still being tested for compliance and for which the reception system would be revised at least twice more before its release to support a general offering of the Service. As a result, the Computer Faire demonstration could not be considered an attempt to exploit the reception system, since the reception system was not yet in a commercially acceptable form suitable for sale. (Papes Declaration, ¶ 14 (Exhibit 7)).

e. Documentary Evidence Of Experimental Use

An abundance of documentary evidence of experimental use was presented above in Section VI.d in the context of the description of the phases of testing of the Prodigy System.

As discussed above, the contemporaneous documentary evidence clearly demonstrates that the system was being tested, not marketed, prior to August 1988.

f. Phases of Testing of Claim Elements

The three phases of testing conducted up to about August 5, 1988 were directed to determining whether Applicants' technique for storing less frequently used data at the user's computer and accessing frequently changing data from the network delivery system as needed would work satisfactorily on a widely-dispersed user and geographic basis. This testing was at the heart of the invention as claimed in claims 33-72 as detailed in Section VI.d above.

g. Measures Taken To Ensure Confidentiality

At no time in the course of Prodigy's test and development period was the Applicants' reception system in the public domain. The 1991 information disclosure statement expressly recites that all persons participating in the first testing phase of the Prodigy Service conducted between January 1987 and September 1987 maintained the project in confidence. In the first phase of test and development extending from January to September 1987, all activities concerning the reception system were confidential and handled exclusively by either Prodigy employees or outside consultants bound by express terms of confidentiality. Further, all documents and materials relating to the reception system were marked confidential and treated accordingly. As a result, the public had no access to or knowledge of the reception system during this phase of testing. Thus, the reception system was not in the public domain. There can be no issue of public knowledge or public use during the first phase of testing because the project was kept confidential. (Larson Declaration, ¶¶ 7-10 (Exhibit 9)).

During the second phase of test and development; i.e., from the beginning of October 1987 to the end of March 1988, Prodigy continued to mark and maintain all documents and materials relating to the reception system as confidential. Further, while the non-employee testers who participated in testing the reception system and Service during this phase, as described above, did receive prototype versions of the reception system software, Prodigy made no disclosure of the source code, or the structure or internal operation of the reception system to them. Rather, Prodigy provided the software to the non-employee test users on terms that required them not to attempt to reverse compile or otherwise reverse engineer the source code. Still further, the users were required to handle the reception system software and Service on a confidential basis. (Rules for the Hartford Pilot, pp. 1-2 (Exhibit 8)). Prodigy also made clear to entities providing applications to the service that all activities were considered of a testing nature and confidential:

Welcome to the Pre-Launch pilot of the PRODIGYSM Interactive Personal Service.

As we discussed, the first PRODIGY Service Members who will see your application will be a controlled group of testers.....

During the Pre-Launch Pilot, we must also ask you to maintain the confidentiality of the Pilot by not showing, discussing with nor disclosing to any non-Member the PRODIGY Service, the software diskettes, Service Guide, other materials provided to you as part of this Pre-Launch pilot, or their contents. By accepting this material, you agree to abide by these requirements.

Letter from Jeannette McClennan to Gene Campbell, January 20, 1988 (Exhibit 23).

During all three phases of testing, feedback was sought and obtained from the test users to ascertain the problems with the system and how they might be resolved. In May 1988, a qualitative analysis of panel testing of the then-current version of the Service concluded:

The speed of response remains the dominant issue with regard to the mechanics of the service. Users are dissatisfied and frustrated by the length of time required for the subject to be called up and for information to be painted on the screen. They attribute the slowness of the service to the presence of general graphics.

Qualitative Analysis: Panel Testing of the 6.0 version with April 1988 content, May 1988, P.7 (Exhibit 24). In July 1988, a study of Founding Members concluded that "Speed is a, if not the, central problem with the Service today." (A Summary Report on Founding Member Focus Groups, July 1988, p.9 (Exhibit 25)). In this copy of the report, a handwritten interlineation reads "increase size of stage". Id., p.9. Clearly, feedback from testers was being used to improve the system. Accordingly, there was no conduct by Prodigy in the second phase of the test and development period that could lead to the conclusion that the reception system software was in the public domain. (Larson Declaration, ¶¶ 7-10 (Exhibit 9)).

Finally, in the third phase of the test and development that extended from the beginning of April 1988 to the beginning of August 1988, Prodigy again continued to mark and maintain confidential all documents and materials that disclosed the source code, and the structure and internal operation of the reception system. While copies of the reception system software were distributed to the select groups of users secured in the third phase of testing, again, Prodigy made no disclosure of the reception system source code, its structure or internal operation. Rather, as in the second phase of test, Prodigy limited distribution of the reception system to distribution of diskettes on which the reception software was provided in object code only, a form substantially unintelligible to the user. Also, Prodigy retained ownership of the reception system software and merely licensed its use to these individuals. And, in accordance with the terms of the license, Prodigy required the recipients to agree not to reverse compile or otherwise reverse engineer the reception system source code. Thus, Prodigy again took all

reasonable and usual steps under the circumstance to keep the structure and operation of the reception system secret, and put the public on notice that Prodigy had reserved its right in the reception system. Accordingly, Prodigy engaged in no conduct in the third phase of the test and development period that could lead to the conclusion that the reception system software had been put in the public domain. (Papes Declaration ¶¶ 5-16 (Exhibit 7); Larson Declaration ¶¶ 11-16 (Exhibit 9)).

Regarding any issue of on-sale during the first through third phases of testing, the 1991 Information Disclosure Statement expressly recites that the Prodigy Service was not the subject of a commercial sale prior to August 5, 1988. In addition, the investigation undertaken in response to the Office Action's inquiry has not found any evidence of a commercial sale of the claimed invention prior to no earlier than August 5, 1988.

An abundance of evidence regarding measures taken to ensure confidentiality during the testing and development of the Prodigy Service during 1987 and 1988 is presented and discussed above in Section VI.d.

h. Implementation And Functionality of The System During Phase III of Testing

The Prodigy reception system and Service were still undergoing testing, modification and development during phase three of the testing period as detailed in Section VI.d above. For example, problems were encountered with the staging of data, i.e., storing constant data on the user's computer, during this period and thereafter.

i. **Founding Members Options for Extended Service**

The so-called "Founding Members" (and Charter Members) options for extended services, detailed fully in Section VI.d above, were an incidental aspect of the testing and development necessarily undertaken to determine whether the invention would work as intended over a broad user base. (Papes Declaration, ¶¶ 4-16 (Exhibit 7); Larson Declaration, ¶ 11-16 (Exhibit 9)). This testing was essential given the pioneering character of the invention--the first broad-based public, multi-purpose, computer network.

j. **Sponsor Agreements and Understanding with Distributors**

Since Prodigy provided transactional as well as informational applications on its service, it was necessary during the test and development period to allow users to purchase goods and services offered in certain applications in order to determine if the transactional aspects of the service and the reception system would operate as intended. During phase two of the testing during the months of January, February and March of 1988, users purchased approximately \$650 worth of goods and services. In the four month period from April 1988 to the beginning of August of 1988, which constituted the third phase of testing, users purchased approximately \$28,000 of goods and services.

Significantly, the money paid for the goods and services purchased was paid to the sponsors of the applications that offered them, not to Prodigy. Further, while these sponsors paid a fee to Prodigy to create and display the applications and advertisements that were run on the sponsor's behalf, these fees were paid to offset the cost of production, operating expense, testing and development costs. Prodigy realized no profit from these activities during the experimental period.

As is customary with software development, Prodigy held discussions with retailers who were to support retail sale of the reception system software when the software was to be offered to the general public in the Fall of 1988. By the beginning of February 1988, Prodigy had reached understandings with approximately six distributors in various channels of distribution; e.g., computer stores, software stores, specialty electronics stores and department stores, who indicated they would handle the software when it became available. In these discussions, Prodigy advised that the reception system and Service were under development, but were expected to become generally available between September and October of 1988. In addition, Prodigy expressly reserved the right not to supply the reception system software until Prodigy felt it was ready for release to the public. By the end of April 1988, the number of distributors with whom Prodigy had reached such understandings had increased to approximately eight. (Minutes of Trintex Executive Committee Meeting 4/27/88, p. 2 (Exhibit 11)).

Applicants respectfully submit that their invention was not ready to be commercially exploited until after the close of the test and development periods i.e., after August 5, 1988. As noted above in connection with the description of the test period, at no time did Prodigy charge for the copies of the reception system software that were distributed or for access to and use of the Service. During the second and third phase of the test period, users paid for goods or services they purchased in the course of accessing certain of the transactional applications, the purchase prices for those items were paid to the sponsors of the applications that offered them. The payments were merely incidental to the testing of the reception system. Fees were also received from sponsors of applications that were running on, or in the process of being created to run on the service. However, those fees were paid for producing the applications and for maintaining them on the Service. The fees received for creating and maintaining the

applications on the Service were therefore wholly incidental to the required testing of the reception system.

The Federal Circuit has held payment in connection with experimental testing does not necessarily establish a section 102(b) bar but is merely one factor to be considered. Baker Oil Tools, Inc. v. Geo Vann, Inc., 828 F.2d 1558, 1564 (Fed. Cir. 1987). Moreover, where the payment is merely incidental to the experimental testing, no bar will be found. For example, the Federal Circuit in TP Laboratories held that payment by dental patients for services rendered in fitting them with free, experimental tooth positioning appliances that were the subject of the invention was incidental to the testing of the appliances, and neither destroyed the experimental nature of the test, nor established a bar under 102(b). TP Laboratories v. Pro Positioners, Inc., 724 F.2d 965, 971-72 (Fed. Cir 1984).

In the instant case, the sales and resulting payments were not compensation for use of Applicants' invention. Rather, they arose from the nature of the experimentation. This is expressly the incidental benefit the Supreme Court approved in City of Elizabeth, when it noted an invention could be experimentally "used in the premises of another and the use inure to the benefit of the owner" of the premises. City of Elizabeth v. American Nicholson Pavement Co., 97 U.S. 126, 135 (1877); see also Seal-Flex, Inc. v. Athletic Track & Court Construction, 98 F.3d 1318, 1322 (Fed. Cir. 1996). Accordingly, payments by the reception system users to application sponsors were only incidental to the testing and could not change the experimental nature of Applicants' testing, or create a section 102(b) bar.

As discussed above, Prodigy proposed to supply start-up kits for the service that would include reception system software in approximately the early fall when the reception system and Service was expected to be available for public distribution. However, since the

reception system and Service were still in test and development stage, during the time of those discussions, Prodigy expressly reserved the right to withhold the kits and reception system software until it felt they were suitable for their intended purposes; i.e., at least until completion of the test and development period.

As pointed out by the Federal Circuit, sales related *arrangements* in and of themselves do not establish a 102(b) bar especially where it has not yet been determined if the invention will operate acceptably in its intended environment. Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 623 (Fed. Cir. 1985). At the time of discussions with the chain store retailers, testing was still in progress to ascertain whether the reception system would perform as intended; i.e., perform all of the functions of the reception system and continue to operate satisfactorily as the user population, application inventory and PC/operating system combinations were expanded. Such discussions thus could not have changed the experimental character of the test and development period or established a bar under section 102(b).

k. August 5, 1988 Revised Version Release

The revised version release of the Prodigy software that occurred in August 1988 had been continually tested and modified with respect to aspects related to the claimed invention as discussed above. However, even if there were no differences from prior versions, there was no public use or on sale because the invention was being tested to determine whether it would work for its intended purpose until well after August 1988, as discussed above.

l. Trintex References

The references cited on form PTO-892 in the November 7, 2002 Office Action do not describe the detailed aspects of the invention and system as claimed in claims 33-72 and, in

any event, the Prodigy System was not fully operational in 1987 to the degree required to determine that the system would work to perform its intended function.

VII. The Rejection of Claims 33-72 Under 35 U.S.C. §135(b)

Applicants' Claims 33-72 have been rejected under 35 U.S.C. §135(b) as not being made prior to one year from the date on which Hill U.S. Patent No. 5,528,490 was granted. More specifically, the Office Action rejected Applicants' argument that the same subject matter of the Hill '490 patent Claim 1 was made by Applicants, in Claim 1 of their application Serial No. 08/158,026, filed November 23, 1993, from December 21, 1994 through April 11, 1996. As shown herein, amended Claim 1 of the grandparent of the present application, i.e., application Serial No. 08/158,026, filed Nov. 23, 1993 was for substantially the same subject matter as Claim 1 of the '490 patent. And because it was pending from December 21, 1994 through April 11, 1996, amended Claim 1 of Applicants' grandparent application was made prior to one year from the date on which the Hill '490 patent was granted. Applicants are therefore entitled to present additional claims directed to the same subject matter as Hill's claims. MPEP §2307.02; Tezuka v. Wilson, 224 USPQ 1030, 1036 (Bd. Pat. Int. 1984).

Amended Claim 1 of Applicants' grandparent application Serial No. 08/156,026 was rejected under 35 U.S.C. § 103 in view of Johnson et al. during prosecution of Serial No. 08/156,026. However, the standard that applies under 35 U.S.C. § 135(b) is not whether the claims are directed to the same or substantially the same patentable invention (the 35 U.S.C. § 135(a) standard for interference in fact), but rather whether they are directed to the same or substantially the same subject matter. See Berman v. Housey, 291 F.3d 1345, 1351 (Fed. Cir. 2002); In re Berger, 279 F.3d 975, 983 (Fed. Cir. 2002). Thus, whether the rejection of Claim 1 as amended over Johnson et al. was a proper rejection is not relevant to the issue of whether

Claim 1 as amended was directed to the same or substantially the same subject matter as a claim of the Hill '490 patent.

In any event, Applicants did not acquiesce to the rejection of amended Claim 1 over Johnson et al. and expressly traversed the rejections in their grandparent application. Applicants stand by that traversal and reiterate that amended Claim 1 is patentable over Johnson et al. as discussed above. A decision was made to forego prosecution of the claim as it existed to advance the case to issue. Applicants did not file a continuation application at that time to continue prosecution of amended Claim 1 as a matter of portfolio management, not because Claim 1 was unpatentable over Johnson et al. This in no way diminishes the fact that Applicants made a claim directed to the same or substantially the same subject matter within the time specified by 35 U.S.C. § 135(b).

Moreover, it "does not matter whether the claims are subsequently cancelled either before or after the issuance of the patent." Tezuka v. Wilson, 224 USPQ at 1036. All that matters is that Applicants were claiming the required subject matter in some earlier application within one year of the issuance of the patent. Cragg v. Fogarty, 2001 WL 1339890, at *12 (Bd. App. & Int. 2001) (citing, e.g., Corbett v. Chisholm, 568 F.2d 759 (CCPA 1977) and Tezuka). Applicants clearly met the applicable standard under 35 U.S.C. § 135(b).

Copied Claim 33 reads as follows:

33. A method for generating information related to a product, the method comprising the steps of:

storing and maintaining variable data and constant data related to at least one product and a main revision status in a memory of a main computer,

the main revision status indicating the revision level of the constant data stored in the main computer;

storing constant data related to the at least one product and a remote revision status in a memory of a remote computer, the constant data being a subset of information data related to the at least one product, the remote revision status indicating the revision level of the constant data stored in the remote computer;

transmitting the remote revision status from the remote computer to the main computer

comparing the remote revision status with the main revision status;

updating constant data stored in the memory of the remote computer with constant data maintained in the memory of the main computer that is different from the constant data stored in the memory of the remote computer;

transmitting variable data related to the at least one product from the main computer to the remote computer; and

integrating constant data related to the at least one product with the variable data related to the at least one product in the remote computer to generate the information data related to the at least one product including both constant data and variable data.

Applicants' amended Claim 1 reads as follows:

1. (amended) A method for operating a computer network so as to provide a multiplicity of users access to a multiplicity of applications, the applications each including data,

the network having one or more host computers, a plurality of concentrator computers connected in groups of one or more to each of the host computers, and

a plurality of reception system computers at which respective users may request applications, the reception system computers being connected in groups of one or more to each of the concentrator computers, the method comprising the steps of:

a. establishing data stores at the host computers, the concentrator computers and the reception system computers;

b. distributing application data in accordance with a predetermined plan to data stores maintained, respectively, at the host computers, the concentrator computers and the reception system computers,

the predetermined plan being implemented, at least in part, by ascribing a storage control attribute to the application data, the control attribute dictating eligibility of the application data for storage; and

c. supplying application data to a respective reception system computer at which an application is requested so that the respective reception system computer can assemble the data which makes up the requested application by selectively collecting data from its own data store and the data stores of the respective host computer and concentrator computer to which it is connected.

Copied Claim 33 is directed to storing and transmitting data between a user's computer and another computer remote from the user's computer via a modem type connection. Amended Claim 1 of Applicants' grandparent application is directed to applications containing data stored and transmitted in a computer network.

Applicants' invention concerns a method for improving the performance of an interactive computer network to enable it to be used on an extremely wide-scale basis which had never before been accomplished. In accordance with Applicants' teaching, steps are described for reducing system response time to user information requests and for enabling inclusion of data rich content; as for example, graphics in the information provided. Moreover, by using distributed storage control as claimed, Prodigy was able to implement a much more cost effective network than would otherwise be possible in a system that did not use the remote computer's storage and computing resources. Utilizing the power of the PC was at the heart of the claimed invention.

Amended Claim 1 of Applicants' grandparent application is directed to distribution and updating of data in a network, with no restriction as to content/quantity of data or objects. As discussed above, the preferred embodiment of Applicants' invention as described in the specification is directed to distribution and updating of the data by using data objects. The following discussion makes reference to Applicants' disclosure of their preferred embodiment. The disclosure applies as well to distribution and updating of data without the use of data objects, i.e., a file-based system. The substantial similarity between Applicants' invention as presented in amended Claim 1 and copied Claim 33 becomes even more apparent upon comparison of Applicants' amended Claim 1, as interpreted in light of Applicants' specification, with Claim 33.

The Office Action argues that 35 U.S.C. §135(b) was not satisfied because amended Claim 1 lacked material limitations found in Claim 33. However, this argument was incorrectly based on the absence of the exact same language in the copied claims and Applicants' amended Claim 1. As a matter of law, the Examiner is required to interpret amended Claim 1 by reference to Applicants' specification. In re Berger, 279 F. 3d at 983 ("the materiality of a limitation in a claim copied to provoke an interference translates to the copying inventor's application for purposes of assessing compliance with 35 U.S.C. § 135(b)"); Tezuka, 224 USPQ at 1036 (where claim proffered as satisfying 35 U.S.C. §135(b) did not explicitly recite the amount of a compound recited by the copied claim, Board referred to the specification to interpret the claim); Coffman v. Ljungkull, 205 USPQ 56, 62 (W.D. Ok. 1979) ("Even though there is a difference in scope between the claims timely asserted in the application and the count originated by copying a claim from the patent for interference purposes, if the terms employed in each case are merely different expressions for the same method or process achieving

substantially the same result, the requirement of the statute is met"); Stalego v. Heymes, 263 F.2d 334, 338 (CCPA 1959) (interpreting claim broadly enough to encompass different embodiments described in the specification of the copier's application and thus to exclude a limitation as material); Reiser v. Williams, 255 F.2d 419, 420 (CCPA 1958) (referring to the specification of the copier's application to interpret claim with respect to materiality of limitation); In re Schutte, 244 F.2d 323, 326 (CCPA 1957) ("The claims of the earlier application, as we have indicated, are to be interpreted on the basis of a specification [prior application] which is substantially the same as that of the application at bar. While they are cast in a form quite different from claim 1 copied from Weinrich and use different terminology, it is clear to us that it is the same invention in substance that is being claimed.").

Moreover, 35 U.S.C. §135(b) is not to be strictly and harshly construed. A holding of noncompliance with the statute should be based only upon a substantial or critical failure of the applicant to assert claims to substantially the same subject matter prior to the one-year limitation. Coffman, 205 USPQ at 61. When amended Claim 1 is interpreted by reference to Applicants' specification, as it must be, it is clear that Applicants were claiming the same subject matter as claimed by Hill in the '490 patent in satisfaction of 35 U.S.C. § 135(b).

**1. The Revision Status Limitation Of Copied
Claim 33 Is Met By The Storage Control
Attribute Of Applicants' Amended Claim 1**

The Claim 33 recitation of storing a constant data revision status at the main computer is matched by Applicants' amended Claim 1 recitation of a "predetermined plan" and recitation of "the predetermined plan being implemented, at least in part, by ascribing a storage control attribute to the application data, the control attribute dictating eligibility of the application data for storage."

Applicants' specification clearly explains the meaning of predetermined plan with respect to the storage control attribute:

The version value ... provides a parameter that can be checked against predetermined values available from delivery system 20 to determine whether an object [data] stored at RS 400 is sufficiently current to permit its continued use, or whether the object has become stale and needs to be replaced with a current object from delivery system 20.

P. 135, lines 36 - p. 136, line 5.

With respect to version checking for currency, where an object [data] stored at RS 400 is initially fetched or accessed during a session, a request to delivery system 20 is made for the object by specifying the version id of the object stored at RS 400. (emphasis added).

In response, delivery system 20 will advise the reception system 400 either that the version id of the stored object matches the currency value, i.e., the stored object is acceptable, or deliver a current object that will replace the stored object shown to be stale.

P. 139, lines 27-30.

Applicants disclose that wherever data is stored, so too is its version identifier. For example, where data objects are used, as in the preferred embodiment, they are provided with a coded version identifier made up of the storage control byte and version control bytes which are elements of the object header. Specification, p. 135, lines 22-28. Since the object's version identifier is part of the object, the version control parameter related to an object is stored wherever the object is stored. Consequently, the latest version level of data contained in an object resides at the network delivery system (or main computer). P. 13, lines 1-10. When a file type format is used, version identification information is likewise included in the data file and thus accompanies the data wherever it is stored.

There is thus no material difference between storing a constant data revision status at the main computer as recited in Claim 33 and ascribing a storage control attribute as part of a predetermined plan as recited in Applicants' amended Claim 1. Applicants' specification shows that amended Claim 1 clearly encompasses storing a constant data revision status at the main computer. See In re Berger, 279 F.3d at 983, and the cases cited above requiring that claims put forth as satisfying 35 U.S.C. §135(b) must be construed by reference to their supporting specification.

**2. The Direction of Data Transmission
Is The Same In Copied Claim 33 And
Amended Claim 1**

The data travels in the same direction in Applicants' system as it does in the system described and claimed in the '490 patent. The fact that data may come from a concentrator computer in Applicants' system is irrelevant. The concentrator computer is part of Applicants' network delivery system and as such is part of a system that performs the same function as the main computer of the '490 patent. Moreover, the concentrator computer is not a material limitation of Applicants' amended Claim 1. See In re Berger, 279 F.3d at 983.

**3. The Steps Of Comparing The Remote Revision Status
With The Main Revision Status and Updating The
Constant Data At The Remote Computer Is The Same
In Copied Claim 33 And Applicants' Amended Claim 1**

The Claim 33 step of comparing the version of the constant data stored in the memory of the remote computer with the version of the same data stored in the memory of the main computer (i.e., network delivery system) is matched by the corresponding recitation of amended Claim 1 of "distributing application data in accordance with a predetermined plan to data stores maintained, respectively, at the host computers, the concentrator computers and the

reception system computers” includes, inter alia, selective updating of stale data based on version checking. Applicants’ disclosure supports this claim language as encompassing the same subject matter as the revision status checking recitation of copied Claim 33. Applicants’ specification states in this regard:

In preferred form, the method aspect of the invention includes ... steps for distributing selected objects [data] within the network in accordance with a predetermined plan based on the likelihood a user will request a particular application. (emphasis added).

P. 5, lines 1-7.

[T]he method aspect of operating the preferred form of the network apparatus includes steps for establishing data stores ... and, thereafter, distributing application data to data stores ... in accordance with a predetermined plan designed to reduce the time required to present a requested application. (emphasis added).

P. 5, lines 20-27.

[T]o render a public informational and transactional network of the type considered here attractive, the network must be both economical to use and fast. That is to say the network must supply information and transactional support to the user at minimal costs and with a minimal response time. In accordance with the present invention, these objectives are sought to be achieved by locating as many information and transactional support objects which the user is likely to request, as close to the user as possible, i.e., primarily at the user’s RS 400 and secondarily at delivery system 20. In this way, the user will be able to access objects [data] required to support a desired application with minimal intervention of delivery system 20, thus reducing the cost of the session and speeding the response time.

P. 134, line 29 - p. 135, line 5.

Additionally, to assure currency of the information and transaction support provided at RS 400, objects [data] are

further coded for version identification and checking in accordance with a system of priorities that are reflected in the storage candidacy coding.

P. 135, lines 17-21. Thus, the recitation of a predetermined plan of information distribution constitutes, inter alia, version identification and checking so that stale information is not used.

Applicants describe different categories of data depending on its frequency of change. RAM and disk cached objects are retained at most for the duration of user sessions (and thus are "variable data"), while objects stored in the stage file are retained between sessions (and thus are "constant data"). The storage control field, located in the header portion of an object, i.e., "storage candidacy", indicates whether the object is stageable, cacheable or trashable:

Storage objects [i.e., CONSTANT DATA] must not be subject to frequent change or update. They are retained between user sessions on the system... Cacheable objects [i.e., VARIABLE DATA] can be retained during the current user session, but cannot be retained between sessions. These objects usually have a moderate update frequency... Trashable objects [another example of an even more transient type of VARIABLE DATA] can be retained only while the user is in the context of the partitioned application in which the object was requested. Trashable objects usually have a very high update frequency and must not be retained to ensure that the user has access to the most current data... Specifically, to effect object storage management, objects are provided with a coded version id made up of the storage control byte and version control bytes identified above as elements of the object header...

P. 134, line 2- p. 135, line 25. An object storage facility provided in the RS software manages objects remotely stored in a local store including a cache (segmented between available RAM and fixed size disk file) and stage (fixed size disk file). P. 133, line 30-p 134, line 28.

Applicants' specification further states with regard to version checking to maintain currency of remotely stored information:

When objects [data] are requested from object storage facility 439, only the latest version of the object will be provided to guarantee currency of information to the user. Object storage facility 439 assures currency by requesting version verification from network 10 for those objects which are available locally and by requesting objects which are not locally available from delivery system 20 where currency is maintained. (emphasis added).

P. 133, lines 7-13.

The version value ... provides a parameter that can be checked against predetermined values available from delivery system 20 to determine whether an object [data] stored at RS 400 is sufficiently current to permit its continued use, or whether the object has become stale and needs to be replaced with a current object from delivery system 20.

P. 135, lines 36 - p. 136, line 5.

With respect to version checking for currency, where an object [data] stored at RS 400 is initially fetched or accessed during a session, a request to delivery system 20 is made for the object by specifying the version id of the object stored at RS 400. (emphasis added).

In response, delivery system 20 will advise the reception system 400 either that the version id of the stored object matches the currency value, i.e., the stored object is acceptable, or deliver a current object that will replace the stored object shown to be stale.

P. 139, lines 27-30. Applicants' predetermined plan thus clearly includes comparing the remote revision status with the main revision status stored at the main computer. Thus, amended Claim 1 of Applicant's grandparent application is directed to selective transmission of data to maintain currency of constant data stored at the remote computer, which is the same as transmitting and comparing a remote revision status with a main revision status as recited by copied Claim 33.

Applicants' recitations in amended Claim 1 of supplying application data to a reception system and of assembling data at the reception system from data collected from the network further correspond to limitations found in copied Claim 33.

Applicants' specification explains that after transmitting the remote revision status to the network delivery system and comparing it to the main revision status, stale constant data is updated at the remote computer:

[D]elivery system 20 will ... deliver a current object [data]
that will replace the stored object shown to be stale.

P. 139, lines 27-30. Applicants' recitation of "distributing application data in accordance with a predetermined plan..." thus clearly includes updating constant data at the remote computer.

Applicants' recitations of supplying application data to a reception system, assembling data at the reception system from data collected from the reception system and assembling data at the reception system from data collected from the network further correspond to the "updating" limitation of copied Claim 33.

Applicants' specification clearly shows that amended Claim 1 encompasses comparing the remote revision status with the main revision status and updating the constant data at the remote computer. See In re Berger, 279 F.3d at 983, and the cases cited above requiring that claims put forth as satisfying 35 U.S.C. §135(b) must be construed by reference to their supporting specification.

**4. The Step Of Combining Constant And Variable
Data At The Remote Computer Is The Same In
Copied Claim 33 And Amended Claim 1**

Claim 33 recites the step of collecting and combining the constant data stored at the remote computer with variable data that is transmitted from the network computer to provide

the requested information about the product or service to the user of the remote computer. Applicants' disclosure supports the corresponding amended Claim 1 recitation of "supplying application data to a respective reception system computer at which an application is requested so that the respective reception system computer can assemble the data which makes up the requested application by selectively collecting data from its own data store and the data stores of the respective host computer and concentrator computer to which it is connected" as constituting the collecting and combining of constant and variable data to provide information to a user at the remote computer.

Applicants give the example of a user at the remote computer purchasing an apple through the network. The price of an apple is transmitted from the network because it is data that changes so frequently that there is no point in storing it at the RS (and thus corresponds to VARIABLE DATA). P. 137, lines 13-19. At p. 148, line 26 - p. 153, line 10, the entire procedure by which the user interacts with the RS and the network to purchase apples is detailed. Again, at p. 149, line 36, the price of an apple is obtained from the network delivery system (or main computer) after being selected from the RS. The presentation data etc. related to the interactive apple purchase corresponds to the CONSTANT DATA of Claim 33 which is stored at the RS because it does not change frequently. The constant presentation data, etc. related to the purchase of apples is clearly shown in Applicants' Fig. 3b, with blank spaces for the variable price data transmitted from the network. Thus, Applicants disclose, inter alia, integrating constant data related to an apple purchase stored at an RS with variable data related to, e.g., the price of an apple obtained from the network. This disclosure governs the interpretation of amended Claim 1 as encompassing the collecting and combining of constant and variable data to provide information to a user at the remote computer. See In re Berger, 279 F.3d at 983, and the

cases cited above requiring that claims put forth as satisfying 35 U.S.C. §135(b) must be construed by reference to their supporting specification.

5. The Step Of Distributing Variable Data From The Main Computer To The Remote Computer Is The Same In Copied Claim 33 And Applicants' Amended Claim 1

The step of transmitting variable data from the main computer to the remote computer in Claim 33 corresponds to Applicants' amended Claim 1 recitation of "supplying application data to a respective reception system computer at which an application is requested so that the respective reception system computer can assemble the data which makes up the requested application by selectively collecting data from its own data store and the data stores of the respective host computer and concentrator computer to which it is connected".

Applicants describe different categories of data depending on its frequency of change. RAM and disk cached objects are retained at most for the duration of user sessions (and thus are "variable data"), while objects stored in the stage file are retained between sessions (and thus are "constant data"). The storage control field, located in the header portion of an object, i.e., "storage candidacy", indicates whether the object is stageable, cacheable or trashable:

Storage objects [i.e., CONSTANT DATA] must not be subject to frequent change or update. They are retained between user sessions on the system... Cacheable objects [i.e., VARIABLE DATA] can be retained during the current user session, but cannot be retained between sessions. These objects usually have a moderate update frequency... Trashable objects [another example of an even more transient type of VARIABLE DATA] can be retained only while the user is in the context of the partitioned application in which the object was requested. Trashable objects usually have a very high update frequency and must not be retained to ensure that the user has access to the most current data... Specifically, to effect object storage management, objects are provided with a coded version id

made up of the storage control byte and version control bytes identified above as elements of the object header...

P. 134, lines 2- p. 135, line 25. An object storage facility provided in the RS software manages objects remotely stored in a local store including a cache (segmented between available RAM and fixed size disk file) and stage (fixed size disk file). P. 133, line 30-p 134, line 28.

Applicants' specification explains that data which changes frequently does not persist on the remote computer beyond, at most, a particular user session, but rather is retrieved from the main computer (i.e., the network delivery system) when needed:

A first candidacy value is applied where the object [data] is very sensitive to time; e.g., news items, volatile pricing information such as might apply to stock quotes, etc. In accordance with this first value, the object will not be permitted to be stored on RS 400, and RS 400 will have to request such objects from delivery system 20 each time it is accessed, thus, assuring currency. A second value is applied where the object is sensitive to time but less so than the first case; e.g., the price of apples in a grocery shopping application. Here, while the price might change from day to day it is unlikely to change during a session. Accordingly, the object will be permitted to persist in RAM or at the disk cache during a session, but will not be permitted to be maintained at RS 400 between sessions.

Filepp et al., p. 137, lines 8-19. When properly constructed by reference to the supporting specification, amended Claim 1 clearly includes the transmission of variable data from the main computer to the remote computer. See In re Berger, 279 F.3d at 983, and the cases cited above governing the interpretation of claims for purpose of 35 U.S.C. § 135(b).

6. The Data Types Are The Same In Copied Claim 33 And Applicants' Amended Claim 1

Claim 33's recitation of storing variable and constant data at the main computer corresponds to Applicants' recitation in amended Claim 1 of "distributing application data in

accordance with a predetermined plan to data stores maintained, respectively, at the host computers, the concentrator computers, and the reception system computers". Applicants' disclosure supports amended Claim 1's language regarding the distribution of application data within the network as constituting the same subject matter as the storing of constant and variable data on a main computer, as recited in Claim 33. As can be seen from the specification, Applicants' network delivery system transmits data to a requesting RS, and routes data entered by the user or collected at the RS within the network. P. 13, lines 1-10. Applicants' amended Claim 1 recitations of a network and establishing data stores at the various computers in the network, respectively, further correspond to the recitation in Claim 33 of storing variable and constant data at the main computer.

Applicants disclosure is far more robust than Hill's and, at the very least, describes different categories of data depending on its frequency of change. RAM and disk cached objects are retained at most for the duration of user sessions (and thus are "variable data"), while objects stored in the stage file are retained between sessions (and thus are "constant data"). As discussed above, the storage control field indicates whether the object is stageable, cacheable or trashable. P. 134, lines 2- p. 135, line 25. An object storage facility provided in the RS software manages objects remotely stored in a local store including a cache (segmented between available RAM and fixed size disk file) and stage (fixed size disk file). P. 133, line 30- p 134, line 28.

As for specific examples of constant and variable data, Applicants disclose, at p. 137, line 6 - p. 138, line 26 of their specification, that data has a storage candidacy value which dictates whether and for how long the data is stored at the RS. Two of the disclosed storage

candidacy values (the first and second values) correspond to the variable data recitation of Claim

33 in that they indicate different degrees of variable data:

A first candidacy value is applied where the object [data] is very sensitive to time; e.g., news items, volatile pricing information such as might apply to stock quotes, etc. In accordance with this first value, the object will not be permitted to be stored on RS 400, and RS 400 will have to request such objects from delivery system 20 each time it is accessed, thus, assuring currency. A second value is applied where the object is sensitive to time but less so than the first case; e.g., the price of apples in a grocery shopping application. Here, while the price might change from day to day, it is unlikely to change during a session. Accordingly the object will be permitted to persist in RAM or at the disk cache during a session but will not be permitted to be maintained at RS 400 between sessions.

P. 137, lines 8-19. Other (the third and fifth) values corresponds to the constant data of Claim

33:

[W]here the object [data] concerns information sufficiently stable to be maintained between sessions a third storage candidacy value is set to permit the object to be stored at RS 400 between sessions, on condition that the object will be version check[ed] the first time it is accessed in a subsequent session.

P. 137, lines 20-25.

Where the object [data] is of a type required to be stored at RS 400, as for example, objects needed to support standard screens, it is coded for storage between sessions ... However, where such objects are likely to change in the future they may be required to be version checked the first time they are accessed in a session and thus [are] given a fifth storage candidacy value.

P. 138, lines 1-7. Variable data, therefore, does not persist at the remote computer. It is

retrieved from the network delivery system (or "main" computer) at which it is stored. Constant

data, as noted above, is stored on the RS but is version checked when accessed. Thus, as noted, the most current constant data is always available from the network delivery system (or main computer).

The recitation in Claim 33 of storing the requested constant data at the remote computer is further matched by Applicants' amended Claim 1 recitation of "distributing application data in accordance with a predetermined plan to data stores maintained, respectively, at the host computers, the concentrator computers and the reception system computers." (including supplying data to the RS). Applicants' disclosure supports the amended Claim 1 language regarding distributing application data within the network as constituting the same subject matter as Claim 33 recitation of storing constant data at the remote computer. As can be seen from the specification, Applicants' network delivery system transmits data to a requesting RS, and routes data entered by the user or collected at the RS within the network. P. 13, lines 1-10.

Applicants' amended Claim 1 recitations of reception system computers at which applications are requested and establishing data stores at various locations within the network, respectively, further correspond to storing constant data at the remote computer as recited in Claim 33.

The recitation in Claim 33 of storing a constant data revision status at the remote computer is matched by Applicants' amended Claim 1 recitation of a "predetermined plan" and recitation of "the predetermined plan being implemented, at least in part, by ascribing a storage control attribute to the application data, the control attribute dictating eligibility of the application data for storage".

As indicated above, in Applicants' disclosure data assigned the third or fifth storage candidacy value are examples of constant data. Applicants specification discloses that, in the preferred embodiment, "objects carry application program instructions and/or information for display at [the] monitor screen... of [the] RS." P. 9, lines 29-30. In this embodiment, the RS includes means for selectively storing program instructions and display data in the form of data objects which are stored at the RS in accordance with a predetermined storage criteria. P. 10, lines 13-27. Applicants further disclose that "to effect object storage management, objects are provided with a coded version id made up of the storage control byte and version control bytes" which are "elements of the object header." P. 135, lines 22-28. The currency of data stored at the RS is established by virtue of the storage control parameters and a check of the version level prior to use. P. 10, lines 13-19. Version checking is performed in the same way for data files, i.e., the version level is included in the file containing the data and the version checking is performed in the same way.

Applicants' amended Claim 1 recitation corresponding to the Claim 33 step of transmitting the remote revision status from the remote computer to the main computer is the step of "distributing application data in accordance with a predetermined plan to data stores maintained, respectively, at the host computers, the concentrator computers and the reception system computers" includes, inter alia, selective updating of stale data based on version checking. Applicants' disclosure supports this claim language as encompassing the same subject matter as the Claim 33 revision status checking recitation. As discussed immediately above, the currency of data stored at the RS is established by virtue of the storage control parameters and a check of the version level prior to use. Applicants' specification states in this regard:

In preferred form, the method aspect of the invention includes ... steps for distributing selected objects [data] within the network in accordance with a predetermined plan based on the likelihood a user will request a particular application. (emphasis added).

P. 5, lines 1-7.

[T]he method aspect of operating the preferred form of the network apparatus includes steps for establishing data stores ... and, thereafter, distributing application data to data stores ... in accordance with a predetermined plan designed to reduce the time required to present a requested application. (emphasis added).

P. 5, lines 20-27.

[T]o render a public informational and transactional network of the type considered here attractive, the network must be both economical to use and fast. That is to say the network must supply information and transactional support to the user at minimal costs and with a minimal response time. In accordance with the present invention, these objectives are sought to be achieved by locating as many information and transactional support objects [data] which the user is likely to request, as close to the user as possible, i.e., primarily at the user's RS 400 and secondarily at delivery system 20. In this way, the user will be able to access objects [data] required to support a desired application with minimal intervention of delivery system 20, thus reducing the cost of the session and speeding the response time.

P. 134, line 29 - p. 135, line 5.

Additionally, to assure currency of the information and transaction support provided at RS 400, objects [data] are further coded for version identification and checking in accordance with a system of priorities that are reflected in the storage candidacy coding.

P. 135, lines 17-21. Thus, the recitation of a predetermined plan of information distribution constitutes, inter alia, version identification and checking so that stale information is not used. Applicants' specification further state with regard to version checking to maintain currency of remotely stored information:

When objects [data] are requested from object storage facility 439, only the latest version of the object will be provided to guarantee currency of information to the user. Object storage facility 439 assures currency by requesting version verification from network 10 for those objects which are available locally and by requesting objects which are not locally available from delivery system 20 where currency is maintained.

P. 133, lines 7-13.

The version value ... provides a parameter that can be checked against predetermined values available from delivery system 20 to determine whether an object [data] stored at RS 400 is sufficiently current to permit its continued use, or whether the object has become stale and needs to be replaced with a current object from delivery system 20.

P. 135, lines 36 - p. 136, line 5.

With respect to version checking for currency, where an object [data] stored at RS 400 is initially fetched or accessed during a session, a request to delivery system 20 is made for the object by specifying the version id of the object stored at RS 400. (emphasis added).

In response, delivery system 20 will advise the reception system 400 either that the version id of the stored object matches the currency value, i.e., the stored object is acceptable, or deliver a current object that will replace the stored object shown to be stale.

P. 139, lines 27-30. Applicants' predetermined plan of data distribution thus clearly includes transmitting the remote version status from the remote computer to the main computer as recited

in Claim 33. Thus, amended Claim 1 of Applicants' grandparent application is directed to selective transmission of data to maintain currency of constant data stored at the remote computer, which is the same as transmitting and comparing a remote revision status with a main revision status as recited by copied Claim 33.

When properly construed by reference to Applicants' supporting specification, amended Claim 1 clearly includes all of the material limitation of copied Claim 33. See In re Berger, 279 F.3d at 983, and the cases cited above governing the interpretation of claims for purposes of 35 U.S.C. § 135(b).

7. Applicants' Amended Claim 1 Inherently Includes The Same Order of Steps As Copied Claim 33

A copied claim is entitled to the earlier effective filing date of an applicant's prior existing claim if all material limitations of the copied claim are present in, or necessarily result from, the limitations of the prior claim. Corbett, 568 F.2d at 766; In re Schutte, 244 F.2d at 326; Stalego, 263 F.2d at 339 ("For the reasons given above, we are of the opinion that count 2 and Heymes et al. claim 1 are directed to substantially the same invention, since they relate to substantially identical processes designed to produce the same result and differ only in minor details which do not materially affect the result obtained.") The sequence of steps is self-evident and inherent in the predetermined plan of data distribution of amended Claim 1.

VIII. The Examiner's Statement Regarding The Rejection of Applicant's Amended Claim 1 Has No Bearing On The Present Case

The Office Action at page 29 relies on the rejection of Claim 1 of Serial No. 08/158,026 as unpatentable over Johnson et al. as supporting a rejection under 35 U.S.C. § 135(b). According to the Office Action, Applicants' amended Claim 1 and Applicants' copied

claims "are not the same invention and [therefore] the copied claims were not made prior to one year from the date Hill '490 issued". In making this rejection, the Office action improperly confuses the standard applicable to a rejection under 35 U.S.C. § 135(b) with the standard applicable to an interference-in-fact determination under 35 U.S.C. § 135(a).

Under 35 U.S.C. § 135(a) the test for interference-in-fact is whether the claims of two or more parties are directed to the same or substantially the same patentable invention. In contrast, under 35 U.S.C. § 135(b), the test is whether applicant made a claim directed to the same or substantially the same subject matter of a patent claim prior to one year from the date the patent issued, not whether they are directed to the same invention. Thus, the rejection of Claim 1 of application Serial No. 08/158,026 as being unpatentable over Johnson et al. is not a proper basis for a rejection of copied Claim 33 under 35 U.S.C. § 135(b).

In any event, as discussed previously herein, Johnson et al., do not teach or suggest the classification of data into types depending on the frequency of change of the data, i.e., constant and variable data, ascribing storage control attributes to the data depending on its frequency of change and updating constant data at the remote computer if it is determined to be stale after comparing the revision status of analogous data stored on the main computer. Johnson et al. describe file sharing between nodes in a distributed computing environment and say nothing about the constant/variable dichotomy with respect to product information displayed on a remote computer in a network as appreciated, disclosed and claimed by Applicants.

The Office Action's speculation about IBM's patent prosecution practices does not constitute a substantive basis for rejection. As discussed above, a decision was made to forego prosecution of amended Claim 1 as a portfolio management issue. Such decisions are made every day by every large patent owner and are not necessarily indicative of anything with

respect to the patentability of claims, as the Office Action improperly suggests. For these reasons, Applicants respectfully submit that they did properly make a claim to the same subject matter of the issued Hill '490 patent prior to one year from the date on which Hill '490 was granted.

IX. The Rejection of Applicants Claims 62-72 Is Unfounded

A method claim constitutes the same subject matter as an apparatus claim if the subject matter as a whole is indistinguishable:

Though a claim expressed in "means for" (functional) terms is said to be an apparatus claim, the subject matter as a whole of that claim may be indistinguishable from that of a method claim drawn to the same steps performed by the means.

In re Freeman, 573 F.2d 1237, 1247 (CCPA 1978). Applicants assert that this is the case here and that the same material limitations appear in the respective method and apparatus claims.

X. The Office Action's Comments As To Applicants' Remarks

Applicants' amended Claim 1 recites, inter alia, "distributing application data in accordance with a predetermined plan... by ascribing a storage control attribute to the application data" and "supplying application data to a respective reception system computer at which an application is requested so that the respective reception system computer at which an application is requested can assemble the data which makes up the requested application by selectively collecting data from its own data store and the data stores of the respective host computer and concentrator computer to which it is connected". The subject matter of amended Claim 1 is substantially the same as copied Claim 33, as is clear when amended Claim 1 is construed by reference to Applicants' specification, as it must be as a matter of law, as explained

above. The order of steps in amended Claim 1 is inherently the same as the steps of copied Claim 33. There is only one sequence in which to perform the steps and achieve the result sought to be achieved by both copied Claim 33 and amended Claim 1. No other sequence of steps makes practical sense. The Office Action's remarks are thus unfounded.

CONCLUSION

Applicants' Claims 33-72, respectively, define the same subject matter as the Hill '490 patent Claims 1-40. In addition, Applicants' amended Claim 1 of their grandparent application also is directed to the same subject matter as the Hill '490 patent Claim 1. For the reasons set forth above, the rejection of Claims 33-72 under 35 U.S.C. §135(b) in view of the Hill '490 patent should be withdrawn and Claims 33-72 should be allowed. An interference should be declared using the Count proposed in Applicants' September 18, 1997 Request for Interference, i.e., Claim 33 of the present application. The undersigned attorney for Applicants stands ready to meet with the Examiner either in person or telephonically to discuss any matters discussed herein if the Examiner feels that a meeting would assist their consideration of the Applicants' request. No additional fee is required for the Response herein.

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Respectfully submitted,



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APPENDIX – LIST OF EXHIBITS

1. Minutes of Trintex Partners' Committee Meeting 11/18/87
2. Minutes of Trintex Partners' Committee Meeting 2/3/88
3. Minutes of Trintex Executive Committee Meeting 4/6/88
4. Memorandum from Robert Filepp, September 13, 1988
5. Minutes of Trintex Partners' Committee Meeting 5/25/88
6. Minutes of Prodigy Executive Committee Meeting 6/29/88
7. Declaration of Theodore Papes (with March 1989 videotape)
8. Rules for the Hartford Pilot
9. Declaration of Frederick S. Larson
10. Minutes of Prodigy Executive Committee Meeting 7/20/88
11. Minutes of Trintex Executive Committee Meeting 4/27/88
12. J.H. Beall, Monthly Activity Report August 1988, dated September 14, 1988
13. Member Acquisition thru July 25, 1988
14. Testing of Prodigy Service, August 10, 1988
15. Membership Services – Problem Management Scoreboard, September 27, 1988
16. Membership Services – Problem Management Scoreboard, October 12, 1988
17. Michael L. Gordon, Reception System Large Stage Support, October 20, 1988
18. Minutes of Prodigy Executive Committee Meeting 11/22/88

19. MS/DOS RELEASE 7.1 HIGHLIGHTS, November 9, 1988
20. Memorandum from C. Scrivanich et al. to J. Sacolick, January 23, 1989
21. Michael L. Gordon, Self Configuring Stage Description, Revised March 1989
22. Speech by Theodore C. Papes, Jr., November 1, 1989
23. Letter from Jeanntte McClennan to Gene Campbell, January 20, 1988
24. Qualitative Analysis: Panel testing of the 6.0 Version with April 1988 Content, May 1988
25. A Summary Report on Founding Member Focus Groups, July 1988